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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,312

12/30/2003

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7590 12/12/2007
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EXAMINER

LAMB, BRENDA A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,312	Applicant(s) DESNOYER ET AL.	
	Examiner Brenda A. Lamb	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,11,13,14 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9,11,13,14 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as obvious over Hattler et al 4,846,791 in view of Berg et al 5,674,208.

Hattler et al shows as depicted in Figures 1-3 stent and a stent mandrel support supporting the catheter or stent comprising: a first member (protrusions arranged at one end of the mandrel) to contact a first end of the stent; a second member (protrusions arranged at the opposite end of the mandrel) to contact a second end of the stent; and a third member connecting the first member to the second member and extending through a longitudinal bore of the stent, the third member having at least three walls 34. Hattler et al shows the third member has a plurality of spikes and these spikes may contact the luminal surface. Hattler et al teaches the divider extends the entire length of the catheter

or stent (see column 4 lines 64-66). Although Hattler et al explicitly fails to teach the stents includes struts as set forth in claims 1 and 4-5, it would have been obvious to support any known stent or catheter tube assembly including that disclosed by Berg et al catheter or stent assembly with metal braids within the catheter or stent assembly acting as a plurality of struts or structural elements used to strengthen a structure by resisting longitudinal compression on the Hattler et al mandrel especially since Hattler infers his mandrel body is capable of accepting different configurations of stent or catheter tubes as inferred by Hattler et al disclosure of the catheter tube or stent at column 5 lines 10-15 and column 6 lines 45-52 for the obvious reason to expect similar end results – a catheter assembly capable of being inserted into a blood vessel. Hattler et al mandrel is capable of supporting the catheter or stent during application of coating thereon and includes walls 34 which substantially prevent a coating from being formed on a portion of the luminal surface of the catheter or stent since it teaches every positively claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987). With respect to claims 7-8, Hattler et al fails to teach the cross-section of the third member is within the scope of claims. Hattler et al teaches the third member can have shapes other than triangular such as cross-shaped or star-shaped. Therefore, it would have been obvious to modify the mandrel in the Hattler et al stent and mandrel combination as set forth above by providing the third member with a shape within the scope of claims 7-8 since Hattler et

al teaches the third member can have shapes other than triangular such as cross-shaped or star-shaped obviously to provide greater support of the catheter or stent. With respect to claim 6, Hattler et al fails to teach that the spikes do not contact the luminal of the stent or catheter. Hattler et al teaches that the geometry of the divider may or may not require protrusions to provide support necessary to prevent collapse of the lumen within the catheter or stent. Therefore, it would have been obvious to modify the Hattler et al mandrel such that the spikes of the third member do not have to touch or contact the luminal of the stent as long as the number of protrusions on the third member are sufficient to prevent collapse of the luminal within the catheter or stent for the obvious reason of providing a plurality of discrete support points – enable one to provide continued support for the catheter despite wear of the one of the discrete protrusions.

Claims 1 and 4-8 are rejected under 35 U.S.C. 103(a) as obvious over Hattler et al 4,846,791 in view of Tower 5,389,106.

Hattler et al shows as depicted in Figures 1-3 stent and a stent mandrel support supporting the catheter or stent comprising: a first member (protrusions arranged at one end of the mandrel) to contact a first end of the stent; a second member (protrusions arranged at the opposite end of the mandrel) to contact a second end of the stent; and a third member connecting the first member to the second member and extending through a longitudinal bore of the stent, the third member having at least least three walls 34 and these wall 34 are shaped and/or sized to substantially prevent a coating from being formed on a luminal surface of the catheter or stent. Hattler et al shows the third

member has a plurality of spikes and these spikes may contact the luminal surface. Hattler et al teaches the divider extends the entire length of the catheter or stent (see column 4 lines 64-66). Although Hattler et al explicitly fails to teach the stents includes struts as set forth in newly amended claims 1 and 4-5, it would have obvious to support any known stent or catheter tube assembly including that disclosed by Tower catheter and stent assembly with wires within the wire frame within the catheter and stent assembly acting as a plurality of struts or structural elements used to strengthen a structure by resisting longitudinal compression on the Hattler et al mandrel especially since Hattler infers his mandrel body is capable of accepting different configurations of stent or catheter tubes as inferred by Hattler et al disclosure of the catheter tube or stent at column 5 lines 10-15 and column 6 lines 45-52 for the obvious reason to expect similar end results – a catheter assembly capable of being inserted into a blood vessel. Hattler et al mandrel is capable of supporting the catheter or stent during application of coating thereon and includes walls 34 which substantially prevent a coating from being formed on a portion of the luminal surface of the catheter or stent since it teaches every positively claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987). With respect to claims 7-8, Hattler et al fails to teach the cross-section of the third member is within the scope of claims. Hattler et al teaches the third member can have shapes other than triangular such as cross-shaped or star-shaped. Therefore, it would have been obvious

to modify the mandrel in the Hattler et al stent and mandrel combination as set forth above by providing the third member with a shape within the scope of claims 7-8 since Hattler et al teaches the third member can have shapes other than triangular such as cross-shaped or star-shaped obviously to provide greater support of the catheter or stent. With respect to claim 6, Hattler et al fails to teach that the spikes do not contact the luminal of the stent or catheter. Hattler et al teaches that the geometry of the divider may or may not require protrusions to provide support necessary to prevent collapse of the lumen within the catheter or stent. Therefore it would have been obvious to modify the Hattler et al mandrel such that the spikes of the third member do not have to touch or contact the luminal of the stent as long as the number of protrusions on the third member are sufficient to prevent collapse of the luminal within the Tower catheter and stent assembly for the obvious reason of providing a plurality of discrete support points – enable one to provide continued support for the catheter despite wear of the one of the discrete protrusions.

Claims 9,11,13-14 and 19-25 are rejected under 35 U.S.C. 103(a) as obvious over Hattler et al 4,846,791 in view of Rosenbluth 4,762,128 and Applicant's Admitted Prior Art (see pages 1-2 and Figure 1 of the originally filed specification).

Hattler et al teaches in drawings which include Figures 12-13 a mandrel assembly comprising: a member to penetrate at least partially into a longitudinal bore of a hollow cylindrical member, the member including outwardly projecting integral walls disposed around the circumference of the mandrel, wherein each of the walls converge with its neighboring wall at an angle. Hattler et al teaches at column 5 lines 10-15 that

the catheter tube supported on the mandrel is radially expandable. Hattler et al explicitly fails to teach the mandrel assembly in combination with a stent including a plurality of struts having abluminal and luminal surfaces in fluid communication through at least a pair of plurality of struts as set forth in newly amended claim 23. However, Rosenbluth teaches at column 10 line 53 to column 11 line 2 coating an expandable stent mounted on a mandrel and catheter assembly prior to its use. Therefore, it would have been obvious to arrange any conventional stent such as one taught by Applicant's Admitted Prior Art which has struts and structure within the scope of the claim on the Hattler et al mandrel and catheter assembly such that the member of the mandrel penetrates the longitudinal bore of the stent since Rosenbluth teaches mounting a stent on a catheter and mandrel assembly to enable one to coat the stent prior to its use. Thus claim 23 is obvious over the above cited references. With respect to claim 19, Hattler et al teaches as depicted in the drawings which includes Figure 16 the design of a mandrel and catheter assembly comprising: a member to penetrate at least partially into a longitudinal bore of a hollow cylindrical member, the member including 6 sides and each side wall surface is non-parallel with its neighboring side wall surface. Hattler et al explicitly fails to teach the stents includes struts and have structure within the scope of newly amended claim 19. However, it would have been obvious to arrange any conventional stent such as one taught by Applicant's Admitted Prior Art which has struts and structure within the scope of the claim on the Hattler et al mandrel and catheter assembly such that the member of the mandrel penetrates the longitudinal bore of the stent since Rosenbluth teaches mounting a stent on a catheter and mandrel assembly

to enable one to coat the stent prior to its use. Thus claim 19 is obvious over the above cited references. With respect to claims 9, 11 and 13-14, Rosenbluth teaches the supporting the stent on a mandrel assembly and the length of the mandrel assembly relative to the length of the stent is within the scope of the claim. Hattler et al shows the mandrel is comprised of a member including integrally formed walls that have a shape and length within the scope of the claims (see Figures 12-13 and 16). Hattler et al teaches at column 5 lines 10-15 that the catheter tube or stent supported on the mandrel is radially expandable. Hattler et al explicitly fails to teach the stents includes struts as set forth in newly amended claims 9, 11 and 13-14. However, it would have obvious to arrange any conventional stent including that disclosed by Applicant's Admitted Prior Art on the Hattler et al mandrel and catheter assembly especially since Rosenbluth teaches mounting a stent on a catheter and mandrel assembly to enable one to coat the stent prior to its use. With respect to claims 24-25, Hattler et al shows as depicted in Figures 1-3 a mandrel and catheter assembly comprising a member having a first end, a second end and at least three sides or walls 34 which extend between the first and second end. Rosenbluth teaches the supporting a stent on a mandrel and catheter assembly. Rosenbluth shows in his Figures the length of the mandrel assembly relative to the length of the stent is within the scope of the claim. Hattler et al explicitly fails to teach the stents includes struts as set forth in newly amended claims 24-25. However, it would have obvious to arrange any conventional stent including that disclosed by Applicant's Admitted Prior Art on the Hattler et al mandrel and catheter

assembly especially since Rosenbluth teaches mounting a stent on a catheter and mandrel assembly to enable one to coat the stent prior to its use.

Applicant's arguments filed 9/25/2007 have been fully considered but they are not persuasive.

Applicant's argument that the recitation that the third member substantially prevents coating from being formed on the luminal surface of the stent is a structural limitation and is more than intended end use is found to be non-persuasive. The examiner maintains that Hattler et al apparatus is capable of supporting the catheter or stent during application of coating thereon such that the third member substantially prevents coating from being formed on at least a portion of the luminal surface of the stent via a portion of the third member which contacts the luminal of the stent, the outer corners 32 of the third member, and especially since Hattler et al teaches every positively claimed element of the apparatus. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

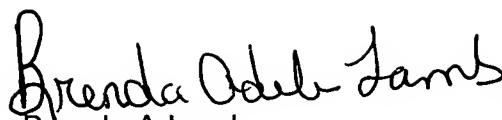
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday with alternate Wednesdays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Brenda A Lamb
Examiner
Art Unit 1734